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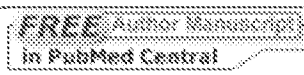
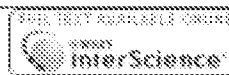
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Calpain 11 is unique to mouse spermatogenic cells.

[Ben-Aharon I](#), [Brown PR](#), [Shalgi R](#), [Eddy EM](#).

Department of Cell and Developmental Biology, Sackler School of Medicine, Tel-Aviv University, Tel-Aviv, Israel.

The calpains are a family of calcium-dependent thiol proteases involved in intracellular processing of proteins. They occur as heterodimers containing one of various large subunits and a common small subunit. Some of the large subunits are expressed ubiquitously and others are expressed in a restricted set of tissues. We have cloned the cDNA for mouse calpain 11 and demonstrated that it is expressed specifically in the mouse testis. The mRNA begins to accumulate in the testis between days 14 and 16 after birth, corresponding to the period of pachytene spermatocyte development. The protein is detected by day 18 after birth, during mid to late pachytene spermatocyte development, and is present in the acrosomal region of spermatozoa from the cauda epididymis. The expression of calpain 11 during spermatogenesis and its localization in spermatozoa suggest that it is involved in regulating calcium-dependent signal transduction events during meiosis and sperm functional processes.

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The expression of calpain 1 and calpain 2 in spermatogenic cells and spermatozoa of the mouse [Mol Reprod Dev. 2005]

The unique catalytic subunit of sperm cAMP-dependent protein kinase is the product of an alternative Calpha mRNA expressed specifically in spermatogenic cells [Mol Biol Cell. 2000]

Expression of human, mouse, and rat m-calpains in Escherichia coli and in murine fibroblasts [Mol Biol Purif. 2004]

Cloning and characterization of a novel gene SRG-L expressed in late stages of chironomid spermatogenesis [Cell] [Mol Biol Cell. 2004]

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